Check List
Journal of Species Lists and Distribution

ISSN 1809-127X (online edition)
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LISTS OF SPECIES

Fish fauna from the Ajó river in Campos del Tuyú National Park, province of Buenos Aires, Argentina

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Abstract: We provide the first list of the ichthyofauna from the Ajó river, a water course situated at the southward border of the Samborombón bay (36°20'12"' S, 56°54'17" W), a RAMSAR site in Argentina. These results were obtained bi-monthly along two years. Forty-five species belonging to 26 families and 11 orders were identified. This fish fauna is composed by freshwater, euryhaline and marine species. Richest groups were Perciformes and Characiformes, with 10 species each. A single species, *Micropogonias furnieri* (whitemouth croaker), represented more than 70 % of the captured specimens, being juvenile individuals only. Remaining species were also represented by juvenile specimens, confirming the importance of this environment as nursery area, particularly for the whitemouth croaker.

Introduction

The Ajó river, located inside the RAMSAR site Samborombón bay, originates by the confluence of Guido del Mar creek and a man-made drainage (Channel 2), both of which flow through part of the depressed Pampas. The Ajó river, with a length of 25 km, and a width averaging 165 m, is the eastern border of Rincón de Ajó Provincial Reserve and the west border of the recently created (May 2009, National law 26.499) Campos del Tuyú National Park. The Ajó river flows into in the southern region of the Samborombón Bay (Figure 1). This environment is subjected to strong fluctuations in volume and salinity, by influence of tides, winds and the pluvial discharge (Carol et al. 2008).

From the zoogeographic point of view, the Ajó river is located in the Pampean Province (López et al. 2008) and it is within the Bonaerensean Atlantic Drainage ecoregion (Abell et al. 2008). Some contributions have been made about the composition of the ichthyofauna of the south region of the Samborombón Bay (e.g. Menni, 1983; Cousseau, 1985, and Lasta, pers. com.). Jaureguizar et al. (2003a; 2004) among others, described fish assemblages from the Río de la Plata including the Samborombón Bay, but a complete list of the fish fauna from the water bodies that discharge in this sector of the bay has not yet made. In this context, we provide the first list of the fish fauna of the Ajó river.

Materials and methods

The list of species is based on the material collected in bimonthly field expeditions made among 2007-2009. Five equidistant sites among themselves were selected from the headwater to its mouth, with the following geographical coordinates: St. 1: 36°28'27" S, 56°59'52" W; St. 2: 36°26'44" S, 56°58'35" W; St. 3: 36°24'59" S, 56°57'56" W; St. 4: 36°23'17" S, 56°56'45" W; St. 5: 36°20'12" S, 56°54'17" W (Figure 1). Fishes were captured using a modified Garlito/Bituron fixed net (Colautti 1998) and a haul net (10 m length with 5 mm stretched mesh in the wings and 2,5 mm stretched mesh in the cod ends). For all the specimens total length and weight were taken. The species were identified according to Ringuelet et al. (1967), Menni et al. (1984), Azpelicueta and Almirón (1991), Miquelarena and Menni (2005) and Miquelarena and López (2006).

Results and discussion

Forty five species belonging to 26 families and 11 orders were identified. Characiformes and Perciformes were represented by 10 species each, followed by Siluriformes with 6 species, Clupeiformes with 5 species, Atheriniformes and Pleuronectiformes with 3 species, Cyprinodontiformes with 2 species and the remaining orders with only one each (Table 1). This usual conformation with an identical diversity in two groups, one characteristic of fresh water and the other mostly marine, clearly indicates the brackish conditions of the studied environment and the great variety of habitats available under estuarine conditions.

One single species, *Micropogonias furnieri*, the whitemouth croaker, was the most abundant species (more of 70 %) followed by *Odontesthes argentinensis* (4.9 %), *Brevoortia aurea* (1.2 %), *Paralonchurus brasiliensis* (1.1 %); the remaining species did not reach 1 %.

Micropogonias furnieri was found associated to coastal and estuarine waters, which are nursery and feeding areas of juveniles (Macchi et al. 1996; Acha et al. 1999; Jaureguizar et al. 2003b; Braverman et al. 2009). In the whole area of study, *M. furnieri* represented respectively the 70.2 % and 89.8 % of the biomass and number of individuals. The capture was totally composed by juveniles measuring around 80 mm total length, which confirms that the studied area functions as a nursery to a large number of species, many of them commercially exploited.

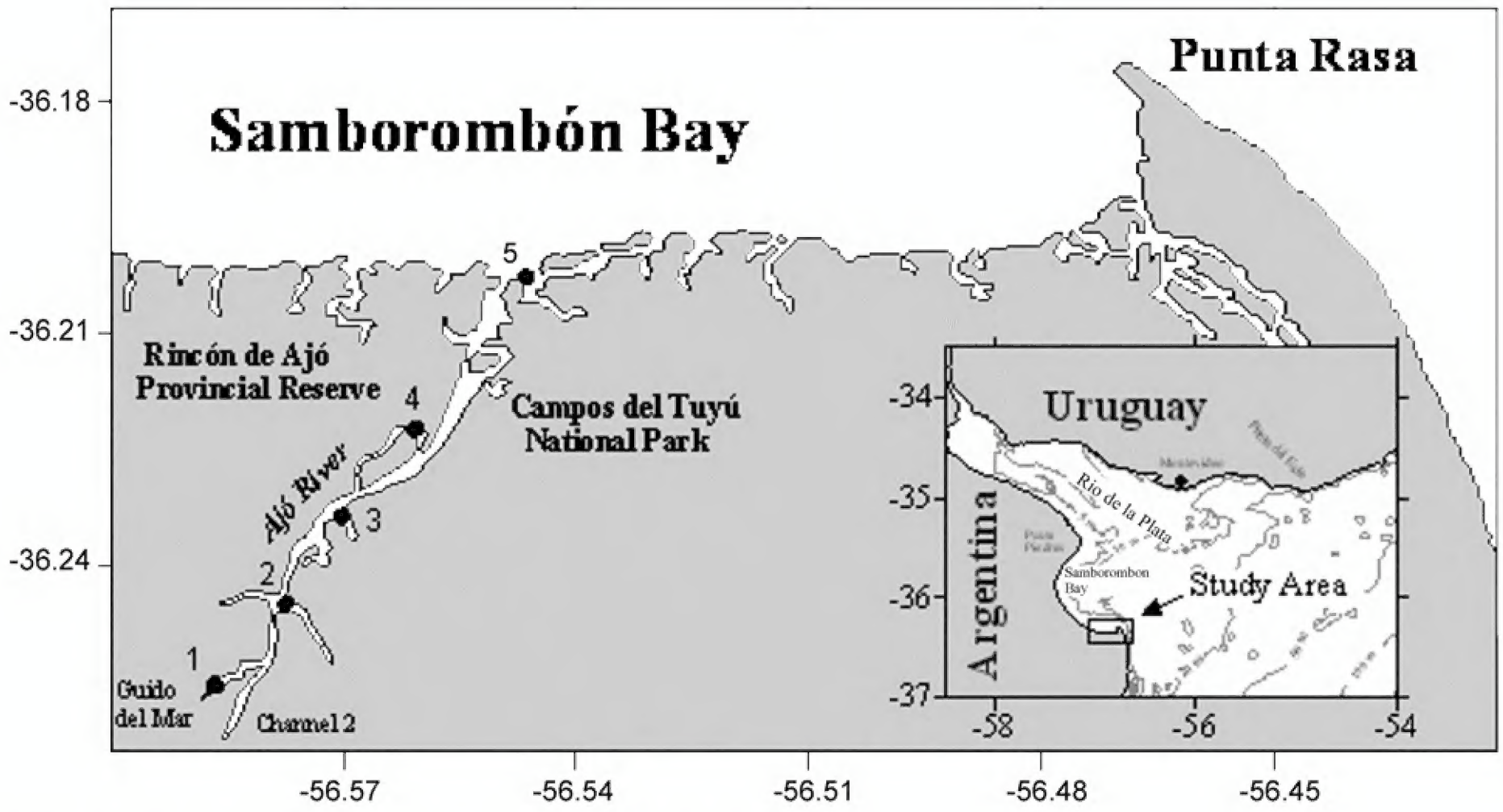

Figure 1. Collection sites (black circles) in the Ajó river.

Table 1. Ichthyofaunal composition of Ajó river, including the site of fish collected.

List of collected species	1	2	3	4	5
Characiformes					
Characidae					
Oligosarcus jenynsii (Günther, 1864)	x	x	x	x	
Cheirodon interruptus (Jenyns, 1842)	x	x	x	x	
Astyanax eigenmanniorum (Cope, 1894)	x	x	x	x	x
Astyanax sp.		x	x		
Bryconamericus iheringi (Boulenger, 1887)			x		
Hyphessobrycon anisitsi (Eigenmann, 1907)	x				
Hyphessobrycon togoi Miquelarena and Lopéz, 2006	x				

List of collected species	1	2	3	4	5
Curimatidae					
Cyphocharax spilotus (Vari, 1987)	x	x			
Cyphocharax voga (Hensel, 1870)	x	x	x	x	x
Erythrinidae					
Hoplias malabaricus (Bloch, 1794)	x				
Siluriformes					
Callichthyidae					
Corydoras paleatus (Jennyns, 1842)	x	x	x	x	x
Heptapteridae					
Pimelodella laticeps Eigenmann, 1917	x	x	x	x	
Rhamdia quelen (Quoy and Gaimard, 1824)	x	x	x	x	x
Loricariidae					
Loricariichthys anus (Valenciennes, 1835)	x	x	x		
Pimelodidae					
Parapimelodus valenciennis (Kröyer, 1874)			x	x	
Pimelodus albicans (Valenciennes, 1840)	x	x	x	x	
Cyprinodontiformes					
Anablepidae					
Jenynsia multidentata (Jenyns, 1842)	x	x	x	x	x
Poeciliidae					
Cnesterodon decemmaculatus (Jenyns, 1842)			x		
Cypriniformes					
Cyprinidae					
Cyprinus carpio Linné, 1758	x		x	x	
Atheriniformes					
Atherinidae					
Odontesthes argentinensis (Valenciennes, 1835)	x	x	x	x	x
Odontesthes bonariensis (Valenciennes, 1835)	x	x	x	x	x
Odontesthes sp.	x	x	x	x	x
Clupeiformes					
Clupeidae					
Brevoortia aurea (Agassiz, 1829)	x	x	x	x	x
Platanichthys platana (Regan, 1917)	x	x	x	x	x
Ramnogaster arcuata (Jenyns, 1842)		x		x	
Engraulidae					
Anchoa marinii Hildebrand, 1943	x	x	x	x	
Lycengraulis grossidens Agassiz, 1829	x	x	x	x	x
Gasterosteiformes					
Syngnathidae					
Syngnathus folletti Herald, 1942	x	x	x	x	x
Mugiliformes					
Mugilidae					
Mugil sp.	x	x	x	x	x
Perciformes					
Cichlidae					
Australoheros facetus (Jenyns, 1842)			x		
Sciaenidae					
Macrodon ancylodon (Schneider, 1801)	x	x	x	x	x
Menticirrhus americanus (Linné, 1758)		x	x	x	x
Micropogonias furnieri (Desmarest, 1823)	x	x	x	x	x
Paralonchurus brasiliensis (Steindachner, 1875)		x	x	x	x
Pogonias cromis (Linné, 1766)	x	x	x	x	x
Pomatomidae					
Pomatomus saltatrix (Linné, 1766)			x		

List of collected species	1	2	3	4	5
Stromateidae					
Stromateus brasiliensis Fowler, 1906			x		x
Carangidae					
Trachurus lathami Nichols, 1920					x
Parona signata (Jenyns, 1841)			x	x	x
Pleuronectiformes					
Cynoglossidae					
Symphurus plagiusa (Linné, 1766)		x	x	x	x
Paralichthyidae					
Paralichthys orbignyanus (Valenciennes, 1839)		x		x	x
Pleuronectidae					
Oncopterus darwinii Steindachner, 1874					x
Gadiformes					
Gadidae					
Urophycis brasiliensis (Kaup, 1858)		x	x	x	x
Scorpaeniformes					
Triglidae					
Prionotus punctatus (Bloch, 1793)	x				
Anguilliformes					
Congridae					
Conger orbignyanus Valenciennes, 1847	x				

Acknowledgements: The authors are grateful to L. Massolo, A. Milessi Millan, F. Cortéz and J. Waessle for the support offered in field work and to the *Centro de Estudios de Recursos Costeros* (CERC) and C. Lasta by offering us a place of work. This research was supported by *Agencia de Promoción Científica* PICT 2005 # 31982.

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Received: August 2009
Revised: September 2009
Accepted: October 2009
Published online: October 2009
Editorial responsibility: Marcelo Loureiro